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| 10/669,806 | 09/23/2003 | Paul A. Jacobs | 42P17501 | 8164 |
| 8791 | 7590 | 09/07/2005 | EXAMINER | |
| BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030 | | | MARTINEZ, DAVID E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2182 | |

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,806

Applicant(s)

JACOBS ET AL

Examiner

David E. Martinez

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 9, the statement "configuring the at least one identification register as a read only register after the peripheral device is enabled" renders the claim indefinite since the register cannot be of the "read only" type. The register is previously written into and during the initialization/configuration steps, prior to the enabling, and thus it contradicts the function of being "read-only". If the applicant is trying to protect the integrity of the data inside the register after initialization, he would protect data from being written into the register and thus "write-protect" the register.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-8, 10-12, 14-18 and 20-27, are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,611,912 to Maleck et al. (Maleck).

1. With regards to claims 1 and 11, Maleck teaches a method, comprising:
programming, based on predefined data [abstract. Figs 2,3 – element 201 column 4 lines 31-35], one or more fields of configuration registers [fig 4 element 406, see step (ii)] of a

peripheral device in response to a configuration cycle of a data processing system [column 3 line 61 to column 4 line 6], the one or more fields of the configuration registers including at least one identification register for identifying the peripheral device [abstract, column 4 line 60 to column 5 line 2, and column 5 line 65 to column 6 line 15]; and

operating the peripheral device using at least one programmed identification register [column 6 lines 15-20].

2. With regards to claims 2 and 12, Maleck teaches the method of claim 1, further comprising enabling the peripheral device in the data processing system after the programming, the peripheral device having an identification derived from the at least one identification register programmed with the predefined data [column 4 lines 7-13].

3. With regards to claims 4 and 14, Maleck teaches the method of claim 2, wherein the peripheral device is a PCI (peripheral component interconnect) compatible device and the enabled peripheral device operates in compliance with a PCI specification [column 3 line 61 to column 4 line 6].

4. With regards to claims 5 and 15, Maleck teaches the method of claim 1, further comprising retrieving the predefined data from a memory associated with the peripheral device prior to programming the peripheral device [column 4 lines 31-35, line 60 to column 5 line 2].

5. With regards to claims 6 and 16, Maleck teaches the method of claim 1, further comprising:

determining whether identification of the peripheral device needs to be programmed using the predefined data [column 4 lines 31-43];

programming the at least one identification registers of the peripheral device using the predefined data, if the identification of the peripheral device needs to be programmed using the predefined data [column 6 lines 43-47]; and

loading the at least one identification registers using default data if the peripheral device's identification does not need to be programmed [column 5 line 65 to column 6 line 15].

6. With regards to claims 7 and 17, the method of claim 6, wherein whether the identification of the peripheral device needs to be programmed is determined based on one or more bit patterns of the predefined data [column 6 lines 21-25].

7. With regards to claims 8 and 18, Maleck teaches the method of claim 1, wherein the at least one identification register includes at least one of vendor ID, device ID, and revision registers [column 4 line 60 to column 5 line 2 and column 5 line 65 to column 6 line 15].

8. With regards to claims 10 and 20, Maleck teaches the method of claim 1, further comprising detecting a reset signal received at the peripheral device, programming the one or more fields of configuration registers of the peripheral device using the predefined data being automatically performed in response to the reset signal [column 3 line 61 to column 4 line 7].

9. With regards to claim 21, Maleck teaches a peripheral device, comprising:

a processor to perform one or more peripheral functions [fig 1 element 101];

one or more programmable configuration registers accessible by the processor, the one or more programmable configuration registers including at least one identification register for identifying the peripheral device [column 6 lines 43-47]; and

a memory coupled to the processor to store predefined data [fig 1 element 102 or fig 2 elements 201 or "system ram], the predefined data being used to program the one or more programmable configuration registers including the at least one identification register in response to a configuration cycle of the peripheral device [column 4 line 60 to column 5 line 2 to column 6 line 15].

10. With regards to claim 22, it's of the same scope as that of claims 8 and 18 above and thus rejected under the same rationale.

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11. With regards to claim 23, Maleck teaches the peripheral device of claim 21, wherein the memory is a serial read-only memory (SRAM) [Figs 2,3 – element 201 column 4 lines 31-35].

12. With regards to claim 24, Maleck teaches a data processing system, comprising:

one or more processors [fig 1 element 101];

a bus coupled to the one or more processors [fig 1 elements 105, 107];

one or more peripheral devices [fig 1 element 106] coupled to the bus, at least one of the peripheral devices including one or more functional units to perform one or more peripheral functions [column 4 lines 7-13].

one or more programmable configuration registers including at least one identification register for identifying the respective peripheral device [column 6 lines 43-47], and

a memory to store predefined data [fig 1 element 102 or fig 2 elements 201 or "system ram], the predefined data being used to program the one or more programmable configuration registers including the at least one identification register in response to a configuration cycle of the peripheral device [column 4 line 60 to column 5 line 2 to column 6 line 15].

13. With regards to claim 25, it's of the same scope as that of claims 8, 18 and 22 above and thus rejected under the same rationale.

14. With regards to claim 26, it's of the same scope as that of claim 23 above and thus rejected under the same rationale.

15. With regards to claim 27, it's of the same scope as that of claim 4 above and thus rejected under the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,611,912 to Maleck et al. (Maleck). In view of US Patent No. 5,383,143 to Crouch et al. (Crouch).

16. With regards to claims 3 and 13, Maleck is silent as to the method of claim 2, further comprising verifying content of the one or more programmed registers against the predefined data before enabling the peripheral device. However, Crouch teaches verifying the content of a programmer register against a predefined data before enabling it for the benefit of checking the data integrity before an operating state to avoid errors and malfunctions [column 13 lines 11-35].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of both Maleck and Crouch to verify the content of the one or more programmed registers against the predefined data before enabling the peripheral device for the benefit of checking the data integrity before an operating state to avoid errors and malfunctions.

Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,611,912 to Maleck et al. (Maleck). In view of US Patent No. 5,764,995 to DeRoo et al. (DeRoo).

17. With regards to claims 9 and 19, Maleck is silent as to the method of claim 1, further comprising configuring the at least one identification register as a read only register after the peripheral device is enabled. However, DeRoo teaches configuring an identification register as a read only register after a peripheral device is enabled for the benefit of protecting the data in the register after initialization [abstract].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of both Maleck and DeRoo to configure the at least one identification

register as a read only register after the peripheral device is enabled for the benefit of protecting the data in the register after initialization.

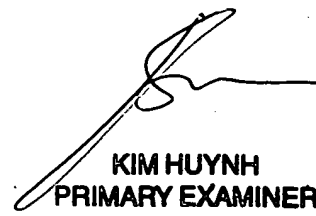
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEM


KIM HUYNH
PRIMARY EXAMINER
2/1/05